



Karlsruhe Institute of Technology

Karlsruher Institute of Technology  
Personalservice (PSE)

Kaiserstraße 12  
76131 Karlsruhe

<http://www.pse.kit.edu>

## PhD Student Position (f/m) in Biomedical Engineering/Applied Mathematics

### Job description:

We seek a PhD candidate for CRC 1173 „Wave Phenomena: Analysis and Numerics“ for project B7 „Dynamics of electro-cardiac depolarization waves“. In this project the spread of depolarization waves in the heart is investigated both from a mathematical point of view and from a biomedical engineering / cardiology point of view. Our goal is to develop, numerically realize and mathematically analyse a fully coupled model for the cardiac electromechanical system and to describe the dynamics of the main types of depolarization waves.

The PhD student will work on her/his research project. As a member of the integrated Research Training Group (iRTG) she/he benefits from a variety of qualification programs including for example advanced and tailor-made courses on the topics of the CRC. The PhD student will attend conferences, workshops and summer schools. Teaching possibilities can be offered, too.

For further information take a look at <http://www.waves.kit.edu>.

### Qualification:

Candidates hold a Master degree (or equivalent) in Mathematics / Physics / Engineering and have a strong background in numerical methods for differential equations and basic knowledge in biomedical engineering and computational modelling. They are open minded, active and have a good command of English language.

### Salary:

The remuneration occurs on the basis of the wage agreement of the civil service in TV-L E13.

### Institute:

Institute of Biomedical Engineering (IBT) / Institute for Applied and Numerical Mathematics (IANM)

### Contract duration:

limited, three years (might be extended)

### Starting date:

as soon as possible

### Application up to:

05.06.2017

### Contact person in line-management:

For further information please contact Prof. Dr. Olaf Dösse, email: [olaf.doessel@kit.edu](mailto:olaf.doessel@kit.edu) or Prof. Dr. Christian Wieners, email: [christian.wieners@kit.edu](mailto:christian.wieners@kit.edu).

### Application:

Applications (CV, cover letter, certificates, names of two referees) should be sent to Christian Knieling ([office@waves.kit.edu](mailto:office@waves.kit.edu)) in a single PDF file.

KIT is an equal opportunity employer. Women are especially encouraged to apply. Applicants with disabilities will be preferentially considered if equally qualified.

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KIT is certified as a family-friendly university (familienfreundliche Hochschule) and offers part-time employment, leaves for family-related reasons, dual career options, and individual coaching for family-work balance.